

11. (Amended) Device according to Claim 10, wherein the regulating circuit receives the information item defining an exclusion zone so as to adapt the quantization interval of the transform and quantization circuit for the macroblocks in this exclusion zone.

IN THE ABSTRACT:

Please add the attached Abstract.

REMARKS

The specification has been amended to include a reference to the priority application, add headings and correct grammatical errors.


The above amendments to the claims have been made to eliminate reference indicia and meet the requirements of the USPTO.

To meet the requirements of the United States, the Abstract, as taken from the published international application, has been amended.

No fee is believed to have been incurred by virtue of this amendment. However if a fee is incurred on the basis of this amendment, please charge such fee against deposit account 07-0832.

Respectfully submitted,

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MARKED UP CLAIMS

1. (Amended) Process for coding images according [too] to the MPEG standard, for the inseting of at least one imagette into an image, utilizing the
5 inter mode [(6, 7)] with motion estimation [(12)] with respect to a reference image and the intra mode [(7)], [characterized in that] wherein:

- an exclusion zone [(4)] which includes the macroblocks which lie even partially in the location of the imagette is defined in the reference image,

- the motion estimation [(12)] of the macroblocks of the image not
10 belonging to the exclusion zone [cannot] does not take account of an image block belonging to the exclusion zone in the reference image.

- macroblocks belonging to the exclusion zone of the image are replaced by macroblocks making up the imagette.

2. (Amended) Process according to Claim 1, [characterized in that] wherein the inter mode for the coding of the macroblocks of the image belonging to an exclusion zone [(4)] is an inter mode with null motion vectors.

3. (Amended) Process according to Claim 1, [characterized in that] wherein the intra mode is forced for the coding of the macroblocks of the image
20 belonging to an exclusion zone [(4)].

4. (Amended) Process according to Claim 1, [characterized in that] wherein it carries out a marking [(18,19)] of the macroblocks of the reference
25 image belonging to the exclusion zone.

5. (Amended) Process according to Claim 4, [characterized in that] wherein the marking consists in performing a transcoding of the luminance values of the macroblocks by decrementing the values equal to the maximum
30 coding value and then by forcing the luminance values of the macroblocks belonging to the exclusion zone to this maximum value.

6. (Amended) Process according to Claim 1, [characterized in that] wherein, for a given row of macroblocks, the coding [(14, 16)] allocates a specific slice for the macroblocks belonging to an exclusion zone.

5 7. (Amended) Process for inserting an imagette into an image coded according to the process of Claim 3, [characterized in that] wherein the macroblocks of an intra-coded slice are replaced by macroblocks relating to the imagette.

10 8. (Amended) Process according to Claim 7, [characterized in that] wherein the replacement consists of a recovery of the intra-coded macroblocks corresponding to the exclusion zones, a baseband decoding of these macroblocks, a mixing with the imagette to be inset into the exclusion zone, a coding of the image obtained so as to provide the replacement macroblocks.

15 9. (Amended) Process according to Claim 7, [characterized in that] wherein the coding adapts the quantization interval for the macroblocks belonging to the exclusion zone as a function of the cost of coding the macroblocks to be inserted.

20 10. (Amended) Device for coding digital video data according to the MPEG standard for the inseting of at least one imagette into an image, comprising a subtractor [(6)] receiving on a first input an intra macroblock and on a second input a predicted macroblock to be subtracted [from] from the intra
25 macroblock so as to provide an inter macroblock, a circuit [(7)] for selecting an inter or intra mode receiving the corresponding intra macroblock or inter macroblock for selecting one of the macroblocks according to an energy criterion, a circuit [(8)] for transforming and quantizing the macroblock selected so as to provide a macroblock of quantized coefficients a circuit [(13)] for the
30 variable-length coding of the macroblock of quantized coefficients and a buffer memory [(14)] for providing a data stream at the output of the coding device, an inverse quantization and inverse transformation circuit [(9)] for obtaining a

macroblock reconstituted [form] from the macroblock of quantized [coefficientsn]
coefficients in an adder [(10)] of the reconstituted macroblock, a memory and
 predictor [(11)] for storing the reconstructed macroblock and providing a
 reconstructed image, a motion estimator [(12)] receiving the intra macroblock
 5 and the reconstructed macroblocks so as to provide a motion vector [(MV)] for
 the memory and predictor so as to calculate the predicted block, a regulating
 circuit [(15)] receiving information form the buffer memory so as to set a
 quantization interval for the transform and quantization circuit [(8)],
 [characterized in that] wherein[:]:

- 10 - the selection circuit [(7)] and the motion estimation circuit [(12)]
 receive an information item pertaining to an exclusion zone [(ZE)] which includes
 the macroblocks lying, even partially, in the location of the imagette,
 - the selection circuit [(7)] forces the intra-coding of the macroblocks
 belonging to this exclusion zone,
 - the motion estimation circuit [(12)] calculates the motion vectors
 while eliminating the motion vectors pointing from the blocks of the
 reconstructed image belonging to the exclusion zone
 and in that it comprises a substitution circuit to substitute, in the data
stream, macroblocks corresponding to the exclusion zone by macroblocks coding
 20 the imagette.

11. (Amended) Device according to Claim 10, [characterized in that]
wherein the regulating circuit [(15)] receives the information item defining an
 exclusion zone so as to adapt the quantization interval of the transform and
 25 quantization circuit [(8)] for the macroblocks in this exclusion zone.